Bangor University - Water Conservation Standards

1. Introduction

The objectives of the Water Conservation Standards (WCS) are to promote and implement sustainable water management practices that reduce water consumption and encourage responsible water usage on the University campus. The WCS will also assist the University in supporting its and the Welsh Government's net zero carbon strategies and local, national, and global sustainable water initiatives.

Water and sustainable water management are at the core of sustainable development and critical for socio-economic development, healthy ecosystems and for human survival itself. It is vital for reducing the global burden of disease and improving the health, welfare, and productivity of populations. Water is also at the heart of adaptation to climate change, serving as the crucial link between the climate system, human society, and the environment¹.

2. Function of the WCS

3. WCS Delivery

a. Water Audits and Assessments

Conduct a water audit and analysis of data and trends to determine water consumption patterns, produce a definitive benchmark, identify areas of greatest water usage per m2, per person and per activity, and identify potential opportunities to better manage water resources

Evaluate the University's water infrastructure, including water sources, distribution systems, and wastewater treatment facilities (i.e. local package treatment and septic tanks), including the potential to reduce impact on local sewer infrastructure Identify potential leaks and water wastage

b. Water Conservation Measures

Investigate the benefit of, and implement where reasonably practicable, water conservation measures, where not previously installed, such as:

- o retrofitting faucets, showerheads, urinals, and toilets with low-flow, more efficient or waterless fixtures.
- o installing sensor-based faucets and toilets to minimise water wastage.
- o promoting water-saving practices through educational campaigns and awareness programs.
- o encouraging the use of native and drought-tolerant landscaping to reduce outdoor water usage
- o implementing rainwater harvesting systems to collect and reuse rainwater for non-potable purposes.
- o removing infrequently used outlets, reducing legionella risk, and reducing the potential for leaks

c. Leak Detection and Repair

Regularly inspect the University's water distribution systems for leaks and promptly repair any identified issues

Monitor water usage data to proactively identify and address leaks

Speedily find and repair water leaks, identifying potential mitigations against future water loss

Educate staff and students about reporting leaks, dripping taps and cisterns, and encourage their active participation in leak detection and water management efforts

d. Water Quality Management

Continue a water quality monitoring program that ensures the safety and quality of drinking water on campus

Regularly test water samples from various sources, including taps and water fountains, for contaminants

Develop an emergency response plan for water quality incidents and communicate it to relevant stakeholders

e. Stormwater Management

Evaluate current stormwater management arrangements and where necessary develop strategies or plans to better manage stormwater runoff, minimising

Seek opportunities for innovation, research, and partnerships to further enhance water management practices and sustainability efforts

Date: 18 April, 2024

4. Review

The WCS will be reviewed every two years by the University.

(End of document)

Approved by:

Wayne Jones, Head of Estates Management

Review date: April, 2026